

### Amendments To The Claims

This listing of claims replaces all prior versions and listings of claims in the application:

1. (Currently amended) A method of providing placement of a plurality of graphical objects on a page accessible by a user, the graphical objects including graphic and text symbols, the page having positions for receipt of the objects, each object having at least one ~~of a~~ link to information, the link being invoked by an event identifying the object by a computer pointing device, the method comprising ~~the steps of:~~

storing and retrieving performance data associated with the likelihood of the event occurring for each object; and

arranging the objects relative to one another on the page according to the performance data.

2. (Original) The method according to Claim 1, wherein the performance data is used to calculate a likelihood that the event will occur, and the arranging of the objects is prioritized according to this likelihood calculation.

3. (Original) The method according to Claim 2, wherein each object has an associated weighting factor, the likelihood calculation is multiplied times the weighting factor, and the arranging of the objects is prioritized according to this product

4. (Original) The method according to Claim 1, wherein the likelihood calculation includes computing a statistical probability that a user will identify the object.

5. (Original) The method of Claim 4, wherein the performance data for the objects has been grouped and sorted according to user characteristics, and the statistical probability is computed based upon the user information, and upon past performance data for that object.

6. (Original) The method according to Claim 3, wherein the objects include advertisements and the weighting factor includes the price of the advertisement.

7. (Original) The method according to Claim 4, wherein the price of the advertisement is measured by the amount paid by the advertiser for each time a user identifies the advertisement.

8. (Original) The method according to Claim 1, wherein the page includes a webpage, on at least one website, accessible by an Internet based system, and the link includes a Uniform Resource Locator.

9. (Withdrawn) A method of providing for placement of graphical objects on a page accessible by a user, the graphical objects including graphic and text symbols, the page having positions for receipt of the objects, each object having a link to information, the link being invoked by an event identifying the object by a computer pointing device, the method comprising the steps of:

receiving a request for a page from a user;

collecting and storing information about the user;

retrieving graphical objects for possible inclusion in the page which have been grouped according to the user information;

retrieving past performance data about the graphical objects;

calculating a likelihood that a graphical object will experience an event based upon the past performance data; and

returning the requested page to the user with the graphical objects which have a higher event likelihood being arranged in more visually prominent positions on the page.

10. (Withdrawn) The method of providing for placement of graphical objects on a page according to Claim 9, wherein each object has an associated weighting factor, the likelihood calculation is multiplied times the weighting factor, and the arranging of the objects is prioritized according to this product.

11. (Withdrawn) The method of providing for placement of graphical objects on a page according to Claim 9, wherein the user information is stored in a centralized database, with the user information accessible via a user identification tag assigned to each user.

12. (Withdrawn) The method of providing for placement of graphical objects on a page according to Claim 11, wherein the method is employed by a system including at least one host site, the site including at least one webpage, and if the user is new to the system, the step of collection and storing information about the user includes the following steps:

redirecting the user request for a page from the site over to a processing device for recognizing the user;

using the processing device to extract and collect information about the user;  
storing this information in the centralized database under the user

identification tag;

passing a processing device cookie file, which includes the identification tag, back to the user;

redirecting the user from the processing device to the site with the identification tag attached to the request;

retrieving the user information databased under the identification tag; and

wherein the final step of the Claim further includes returning a cookie file from the site to the user, the cookie file including the identification tag.

13. (Withdrawn) The method of providing for placement of graphical objects on a page according to Claim 11, wherein the method is employed by a system including at least one host site, the site including at least one page, and if the user is new to the site but has previously visited the system, the step of collecting information about the user to the website including the following steps:

redirecting the user request to the site over to a processing device for recognizing the user, along with a processing device cookie file which already exists for the user;

redirecting the user from the processing device to the site with the identification tag attached to the request;

retrieving the user information databased under the identification tag; and

wherein the final step of the Claim further includes returning a cookie file from the site to the user, the cookie file including the identification tag.

14. (Withdrawn) The method of providing for placement of graphical objects on a page according to Claim 11, wherein the method is employed by a system including at least one host site, the site including at least one page, wherein if the user has previously visited the site and the system, the step of collecting information about the user to the site includes the following steps:

receiving a cookie file including the user identification tag along with the request for a page; and

retrieving the user information databased under the identification tag.

15. (Withdrawn) The method of providing for placement of graphical objects on a page according to Claim 9, wherein the performance data includes counts of a user identifying an object (click-through counts) and counts of each time an object is displayed (impression counts), and the step of calculating a likelihood uses a summation of click-through counts, and a summations of impression counts, along with the prior likelihood for each advertisement.

16. (Withdrawn) The method of providing for placement of graphical objects on a page according to Claim 15, wherein the prior likelihood is set to a high value for objects which are new to the system.

17. (Withdrawn) The method of providing for placement of graphical objects on a page according to Claim 9, wherein a device is employed for creating and maintaining data groups which are differentiated by user characteristics, the processor also being used for sorting and storing performance data concerning the objects into the new and existing data groups.

18. (Withdrawn) The method of providing for placement of graphical objects on a page according to Claim 17, wherein the device runs periodically in the background.

19. (Currently amended) A system for providing placement of a plurality of graphical objects on a page accessible by a user, the graphical objects including graphic and text symbols, the page having positions for receipt of the objects, each object having at least one ~~of a~~ link to information, the link being invoked by an event identifying the object by a computer pointing device, the system comprising:

a device for storing data associated with the past performance of an object;  
a server for prioritizing objects relative to one another on a page according to the data.

20. (Original) The system according to Claim 19, wherein the server performs a calculation which predicts the likelihood of an event occurring for the object, and the server prioritizes the objects on the page according to this calculation.

21. (Original) The system according to Claim 20, wherein a weighting factor for each object is multiplied times the likelihood of an event occurring, and the server prioritizes the objects on the page according to this product.

22. (Original) The system according to Claim 19, which further includes a device for creating and arranging data groups for storing the data associated with the past performance of an object.

23. (Original) The system according to Claim 22, wherein the data groups are delineated by user characteristics.

24. (Original) The system according to Claim 23, which further includes a device for gathering and storing user information.

25. (Original) The system according to Claim 24, wherein the server collects a set of objects associated with the user information, and the server performs a calculation which predicts the likelihood of an event occurring for each object within the set from the data associated with the past performance of the object, and the server prioritizes the objects on the page according to this calculation.

26. (Original) The system according to Claim 24, wherein the server collects a set of objects associated with the user information, and the server performs a calculation which predicts the likelihood of an event occurring for each object within the set from the data associated with the past performance of the object, a weighting factor for each object

is multiplied times the likelihood of an event occurring, and the server prioritizes the objects on the page according to this product.

27. (Withdrawn) A system for providing placement of graphical objects on a page accessible by a user, the graphical objects including graphic and text symbols, the page having positions for receipt of the objects, each object having at least one of a link to information, the link being invoked by an event identifying the object by a computer pointing device, the system comprising:

- a device for recognizing users which collects and provides information about users of the system;

- a device for creating and arranging data groups according to user characteristics;

- a database which stores statistical performance data about the objects according to the data groups;

- a database for storing advertisement and content information for possible placement on the page; and

- an advertisement server which:

  - receives a request for a page from a user;

  - retrieves user information from the device for recognizing users;

  - retrieves advertisements for possible placement on the page from the database using the user information;

  - calculates a likelihood that an event will occur for each object by retrieving and using the statistical performance data from the database; and

  - returns the page with the objects arranged according to their event likelihood.

28. (Withdrawn) The system according to Claim 27, wherein the device for recognizing user interacts with a centralized database which uses identification tags assigned to each user for accessing user information.

29. (Withdrawn) The system according to Claim 27, wherein the system further includes devices for counting when a user identifies an advertisement (click-through

counts), and the times an advertisement is displayed (impression counts), and the information is logged into a database.

30. (Withdrawn) The system according to Claim 29, wherein the logged information is processed, according to direction from the device for creating and arranging data groups according to user characteristics, to provide the statistical performance data in the respective database.

31. (Withdrawn) The system according to Claim 30, wherein the processing is performed periodically as a background task.

32. (Withdrawn) The system according to Claim 27, wherein an interface is also provided which allows access to view the statistical performance data associated with an object.

33. (Withdrawn) The system according to Claim 27, wherein an interface is also provided which facilitates placement of objects within the database for storing advertisement and content information.

34. (Withdrawn) A system for providing placement of graphical objects on a page accessible by a user, the graphical objects including graphic and text symbols, the page having positions for receipt of the objects, each object having at least one of a link to information, the link being invoked by an event identifying the object by a computer pointing device, the system comprising:

means for arranging and storing objects according to data groups of user characteristics;

means for receiving a request for a page from a user;

means for collecting information about the user;

means for retrieving objects from data groups corresponding to the user information;

means for calculating the likelihood of an event occurring; and

means for returning the requested page to the user with the objects arranged according to the event likelihood calculation for each object.

35. (Withdrawn) The system according to Claim 34, wherein the system also includes a means for multiplying the event likelihood calculation times a weighting factor

for each object to yield a product, and the requested page is returned to the user with objects having a high resulting product arranged in the more visually prominent positions on the page.

36. (Currently amended) A method of arranging a plurality of graphical objects on a page viewable by a user on a computer display, comprising:

storing a plurality of graphical objects;

calculating a value indicative of the rate that a specified event occurs for each graphical object displayed to the user; and

displaying at least some of the graphical objects to the user, where the displayed graphical objects are arranged relative to one another on the page using the calculated values.

37. (Previously presented) The method according to claim 36, wherein the displayed graphical objects are arranged in decreasing visual prominence on the page in decreasing order of calculated value.

38. (Previously presented) The method according to claim 37, wherein each displayed graphical object includes a link to information, and the specified event is a user invoking the link.

39. (Previously presented) The method according to claim 38, wherein the specified event is a click-through and the calculated value for a graphical object is indicative of the rate that users click through the link associated with the graphical object.

40. (Previously presented) The method according to claim 36, wherein the displayed graphical objects are arranged on the page in descending order using the product of the calculated value and a weighting factor.

41. (Previously presented) The method according to claim 40, wherein the weighting factor is a monetary amount.



42. (Previously presented) The method according to claim 41, wherein the monetary amount is revenue per user.

43. (Previously presented) The method according to claim 41, wherein each displayed graphical object includes a link to information, the specified event is a user invoking the link, and the monetary amount is a price per click through when a user invokes a link to information associated with a graphical object.

44. (Previously presented) The method according to claim 38, wherein each graphical object includes at least one of graphic and text symbols.

45. (Previously presented) The method according to claim 44, wherein each graphical object is one of an advertisement and a topic tile.

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46. (Previously presented) The method according to claim 38, wherein a stored graphical object may have associated with it at least one constraint on the display of the graphical object.

47. (Previously presented) The method according to claim 46, wherein one constraint is a restriction on pages or positions where the graphical object may be displayed.

48. (Previously presented) The method according to claim 46, wherein one constraint is a restriction on a demographic variable of a user to whom the graphical object should be displayed.

49. (Previously presented) The method according to claim 36, wherein the calculated value is based, at least in part, on the prior performance of the graphical object.

50. (Previously presented) The method according to claim 49, wherein when a graphical object is Previously presented, the calculated rate initially is set to an overestimated value so that the calculated value converges from above.

51. (Withdrawn) A method of displaying advertisements on a page viewable by a user on a computer display, comprising:

storing a plurality of advertisements, each advertisement including a link to information that is able to be invoked by a user identifying the advertisement by use of a computer pointing device;

calculating the probability that a user will invoke the link associated with an advertisement displayed to the user; and

displaying at least some of the advertisements to the user, where the advertisements are arranged on the page in descending order as a function of the calculated probability that the user will invoke the link for each displayed advertisement.

52. (Withdrawn) The method according to claim 51, wherein the displayed advertisements are arranged on the page in descending order using the product of the calculated probability and a weighting factor relating to a monetary amount.

53. (Withdrawn) The method according to claim 52, wherein the monetary amount is one of a revenue per user and a price per click through when a user invokes a link associated with an advertisement.

54. (Withdrawn) The method according to claim 53, wherein a stored advertisement may have associated with it at least one constraint on the display of the advertisement.

55. (Withdrawn) The method according to claim 54, wherein one constraint is a restriction on pages or positions where the advertisement may be displayed.

56. (Withdrawn) The method according to claim 54, wherein one constraint is a restriction on a demographic variable of a user to whom the advertisement should be displayed.

57. (Withdrawn) The method according to claim 51, wherein the calculated probability is based, at least in part, on the prior performance of the advertisement.

58. (Withdrawn) The method according to claim 57, wherein when an advertisement is new, the calculated probability initially is set to an overestimated value so that the calculated probability converges from above.

59. (Withdrawn) A method of prioritizing the placement of objects displayed to a user on a computer display, comprising:

storing a plurality of objects in a database, each object including at least one of graphics and text, having a link to information, and being associated with a client of a service for displaying objects;

calculating a service revenue amount associated with each object;

ordering at least some of the objects using the calculated revenue amounts for the objects; and

displaying the ordered objects to a user;

wherein the revenue amount for each object comprises the product of a click through percentage and a cost-per-click, where the click through percentage is an estimation of the probability that a user will click on the link for the displayed object and the cost-per-click is a monetary amount the client will pay the service if a user clicks on the link for the displayed object.

60. (Withdrawn) The method according to claim 59, wherein the displayed objects are arranged in decreasing visual prominence in decreasing order of calculated revenue amount.

61. (Withdrawn) The method according to claim 60, wherein a stored object may have associated with it at least one constraint on the display of the object.

62. (Withdrawn) The method according to claim 61, wherein the at least one constraint is at least one of a restriction on pages or positions where the object may be displayed and a restriction on a demographic variable of a user to whom the object should be displayed.

63. (Withdrawn) The method according to claim 59, wherein the click through percentage is based, at least in part, on the prior performance of the object.

64. (Withdrawn) The method according to claim 63, wherein when an object is new, the click through percentage initially is set to an overestimated value so that the click through percentage converges from above.

65. (Withdrawn) The method according to claim 59, wherein the revenue amount for each object additionally includes an amount of revenue per impression, which is a monetary amount the client will pay the service for each time the object is displayed.

66. (Withdrawn) The method according to claim 65, wherein the amount of revenue per impression may be zero for at least some of the objects.

67. (Withdrawn) A method of displaying graphical objects on a webpage accessible by a user over the Internet, comprising:

storing a plurality of graphical objects, each graphical object including a link to further information on the Internet that can be invoked by a user, and having an associated click-through percentage and cost-per-click; and

displaying at least some of the graphical objects on a webpage displayed to a user, wherein the graphical objects are arranged using the product of the click-through percentage and the cost-per-click associated with the respective displayed graphical objects.

68. (Withdrawn) The method according to claim 67, wherein the displayed graphical objects are arranged in decreasing order of said product.

69. (Withdrawn) The method according to claim 67, wherein each graphical object includes at least one of graphic and text symbols.

70. (Withdrawn) The method according to claim 67, wherein each graphical object is one of an advertisement and a topic title.

71. (Withdrawn) The method according to claim 67, wherein a stored graphical object may have associated with it at least one constraint on the display of the graphical object.

72. (Withdrawn) The method according to claim 71, wherein the at least one constraint includes at least one of a restriction on pages or positions where the graphical object may be displayed and a restriction on a demographic variable of a user to whom the graphical object should be displayed.

73. (Withdrawn) The method according to claim 67, wherein the click-through percentage is based, at least in part, on the prior performance of the graphical object.

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